

Applicants: Howard J. Worman and Naoto Mamiya  
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- E
- a) incubating said compound, the hepatitis C virus envelope E2 protein or its variant and said cellular protein capable of specifically binding to said hepatitis C virus E2 protein under suitable reaction conditions,
  - b) determining the interactions between the hepatitis C virus envelope E2 protein or its variant and said cellular protein in the presence of said compound, and
  - c) comparing the interactions in step (b) with the interaction between the hepatitis C virus envelope E2 protein or its variant and said cellular protein in the absence of said compound so as to identify a compound which inhibits the binding of hepatitis C virus envelope E2 protein to the cellular protein.
- F

58.  
56. The method of claim 55, wherein the cellular protein comprises Eo protein or its variant.

59.  
57. The method of claim 56, wherein the Eo protein comprises the amino acid sequence set forth in SEQ ID NO: 1.

60.  
58. The method of claim 56, wherein the variant of Eo protein comprises 120 amino acids set forth in SEQ ID NO:1.

61.  
59. The method of claim 56, wherein the variant of Eo protein comprises Eo1, having amino acids 1-120 set forth in SEQ ID NO:1.

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62. The method of claim 55, wherein the hepatitis C virus envelope E2 protein comprises the amino acid sequence set forth in SEQ ID NO:2.

63. The method of claim 55, wherein the variant of hepatitis C virus envelope E2 protein comprises 254 amino acids set forth in SEQ ID NO:2.

64. The method of claim 55, wherein the variant of hepatitis C virus envelope E2 protein comprises amino acid sequence set forth in SEQ ID NO:2.

E 65. The method of claim 55, wherein the compound is not previously known.

66. The method of claim 55, wherein the cells are liver cells.

67. The method of claim 64, wherein the liver cells are human liver cells.

F  
68. A method for determining whether a compound can be used for treating or preventing hepatitis C virus infection in a subject, wherein said compound inhibits the binding of hepatitis C virus envelope E2 protein to a cellular protein associated with hepatitis C virus attachment onto cells and their entry into cells so as to block the attachment of hepatitis C virus onto cells, comprising:

- a) incubating said compound, the hepatitis C virus envelope E2 protein or its variant and said cellular protein capable of specifically binding to

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said hepatitis C virus E2 protein under suitable reaction conditions,

- b) determining the interactions between the hepatitis C virus envelope E2 protein or its variant and said cellular protein in the presence of said compound, and
- c) comparing the interactions in step (b) with the interaction between the hepatitis C virus envelope E2 protein or its variant and said cellular protein in the absence of said compound so as to identify a compound which can be used for treating or preventing hepatitis C infection.

69.  
67. The method of claim 66, wherein the cellular protein comprises Eo protein or its variant.

70.  
68. The method of claim 67, wherein the Eo protein comprises the amino acid sequence set forth in SEQ ID NO:1.

71.  
69. The method of claim 67, wherein the variant of Eo protein comprises 120 amino acids set forth in SEQ ID NO:1.

72.  
7. The method of claim 67, wherein the variant of Eo protein comprises Eol protein having amino acids 1-120 set forth in SEQ ID NO:1.

73.  
7. The method of claim 66, wherein the hepatitis C virus envelope E2 protein comprises the amino acid sequence set forth in SEQ ID NO:2.

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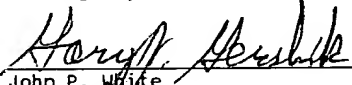
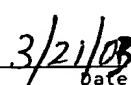
74. The method of claim 66, wherein the variant of the hepatitis C virus envelope E2 protein comprises 254 amino acids of set forth in SEQ ID NO:2.
75. The method of claim 66, wherein the variant of the hepatitis C virus envelope E2 protein comprises the amino acid sequence set forth in SEQ ID NO:3.
76. The method of claim 66, wherein the compound is not previously known.
77. The method of claim 66, wherein the cells are liver cells.
78. The method of claim 75, wherein the liver cells are human liver cells.

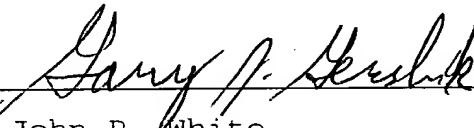
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No fee, other than the enclosed RCE fee of \$375.00, is deemed necessary in connection with this Preliminary Amendment. However, if any additional fee is required, authorization is hereby given to charge the amount of such fee to Deposit Account No. 03-3125.

Respectfully submitted,

I hereby certify that this correspondence is being deposited this date with the U.S. Postal Service with sufficient postage as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231, Box RCE.	
 John P. White Reg. No. 28,678 Gary J. Gershik Reg. No. 39,992	 3/21/03 Date

  
John P. White  
Registration No. 28,678  
Gary J. Gershik  
Registration No. 39,992  
Attorney for Applicant  
Cooper & Dunham LLP  
1185 Avenue of the Americas  
New York, New York 10036  
(212) 278-0400